

**A**

Nucleotide

ATGAAGAGCGTCTTGCTGACACACGGCTCCTCGTCACACCTGGGCCCTGGAGCAA  
TAATTATGCCGGTGGACTGCCCTCAACACTGTGACAGCAGTGAAGTGCAGAAAGCAGGCCGGCTGCA  
AGAGGACAGTGCTCGACCGACTGTGGCTGCCGAGTGTGCCGCTGCAGGGGGAGAAACTTGC  
TACCGCACAGTCTCAGGCATGGCATGGATGGCATGAAGTGTGGCTGAGGTGTCAAGCCTCTAA  
TGGGGAGGATCCTTTGGTAAGAGGAGTTGGTATCTGCAAAGACTGTCCCTACGGCACCCCTCGGGA  
TGGATTGCAGAGAGACCTGCAACTGCCAGTCAGGCATCTGTGACAGGGGACGGGAAAATGCCTG  
AAATCCCCCTCTCCAATATTCAAGTAACAGTAACTCCAAAGTCTTCCAACAGATTGTGTTCTCACGGAGCA  
TGACATGGCATCTGGAGATGGCAATATTGTGAGAGAAGTGTGAAAGAGAATGCTGCCGGGT  
CTCCCGTAATGAGGAATGGTTAAATCCACGCTGA      SEQ ID NO:1

Protein

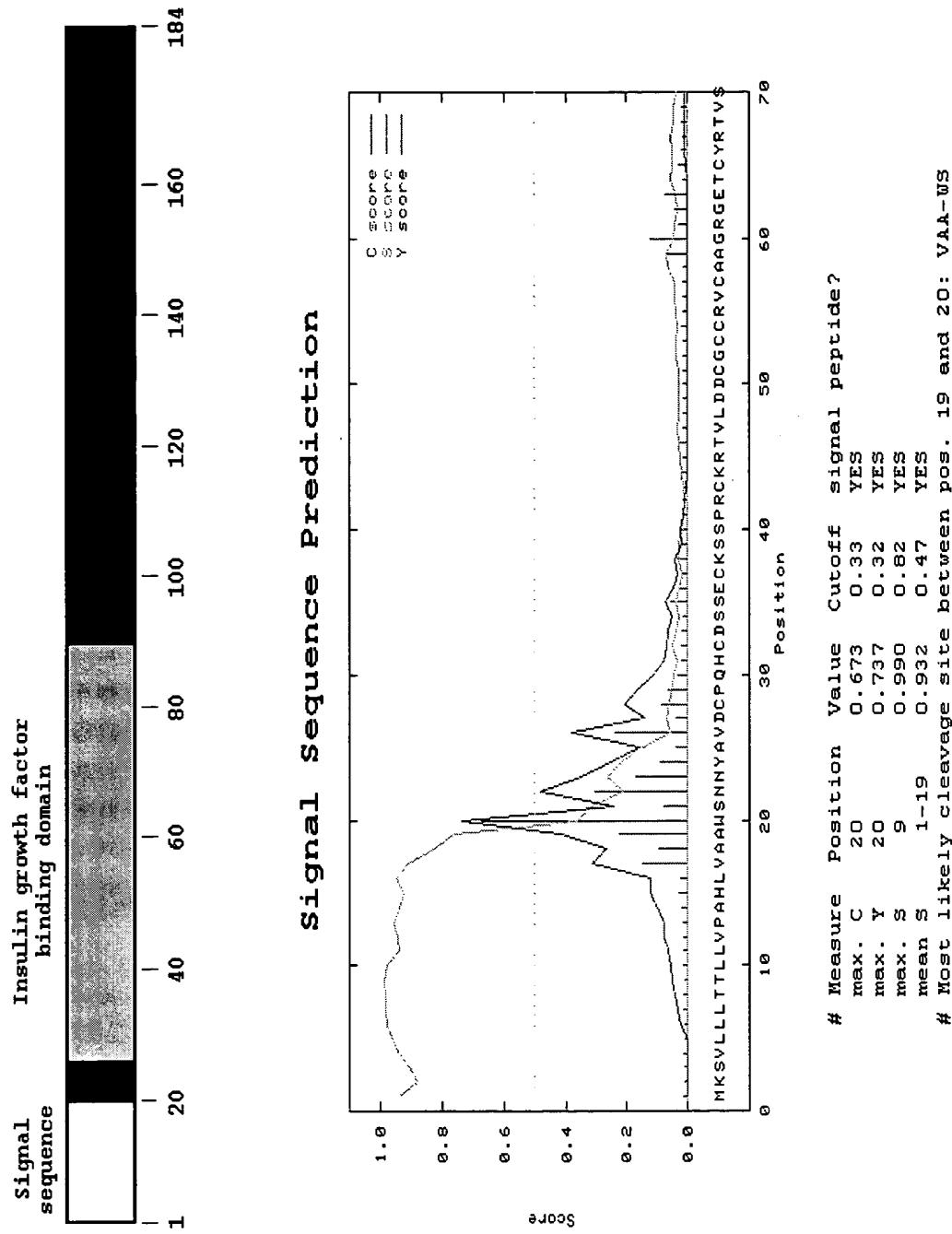
MKSVLLLTLVPAHLVAWSNNYAVDCPQHCDSSSECKSSPRCKRTVLDDCGCCRVCAGRGETC  
YRTVSGMDGMKCGPGLRCQPSNGEDDPFGEEFFGICKDCPYGTFGMDCRETCNCQSGICDRGTGKCL  
KFPFFQYSVTKSSNRFVSLTEHDMASGDGNIVREEVVKENAAAGSPVMRKWLNPSEQ ID NO:2

**Insulin Growth Factor Binding Domain Homology**

**B**

**ESM-1** 26 VDCPQQHCDSSSECKSSER--CKRTVLD**DGCCRVCAGRGETC**YRTVSGMDGMK**C**GPGLRCQESNGED 90 SEQ ID NO:3  
**IGFBP-1** ARCP-P**C**SPAROPPEPGCAEL**VYLD**GCGCCP**V**CARQE**E**P**C**-----**GAYTPPCAPGLRCD**EP**P**GE 61 SEQ ID NO:4

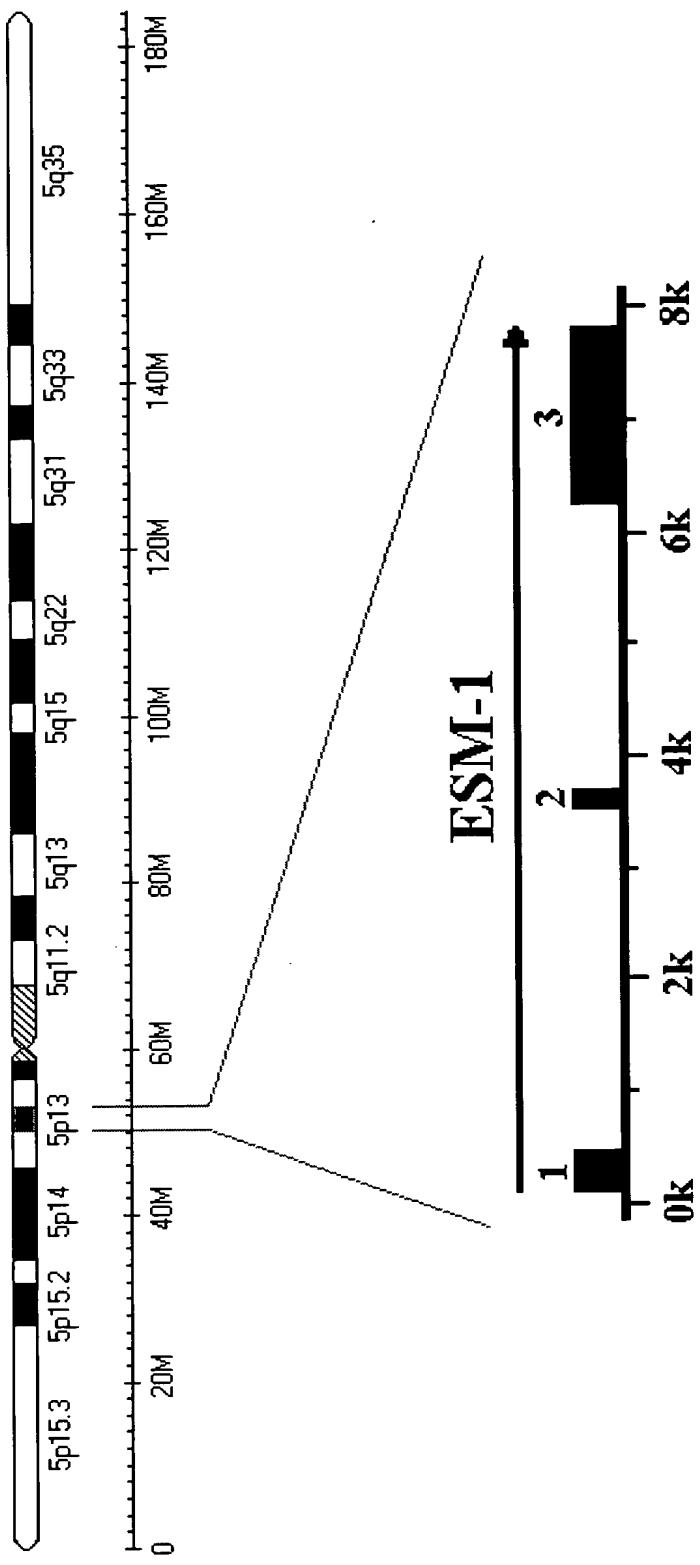
**FIGURE 2**



### FIGURE 3

Rat_ESM1	KKSLLLTLLIPLHLGIAWSAKYAVDCPKHCD <b>E</b> TCCRSSLRCKRTVLLDDCCCQVCLAGPGETCYRTVSGMDGV	75
Mouse_ESM1	KKSLLLTLLIPLHLGIAWSAKYAVDCPKHCD <b>D</b> TECCRSSLRCKRTVLLDDCCCQVCLAGPGETCYRTVSGMDGV	75
Human_ESM1	KKSLLLTLLIPLHLGIAWSAKYAVDCPKHCD <b>S</b> EC <b>E</b> SSPRCKRTVLLDDCCCQVCLAGPGETCYRTVSGMDGV	75
Rat_ESM1	KCCGPGLKCHFVSEEDDFGDEF <b>G</b> DKDCPYGTCM <b>D</b> KE <b>T</b> CNCQSCICIDRVTGRC <b>L</b> DE <b>P</b> FFQY <b>A</b> AKSPSRTSASQ	150
Mouse_ESM1	KCCGPGLKCHFVSEEDDFGDEF <b>G</b> DKDCPYGTCM <b>D</b> KE <b>T</b> CNCQSCICIDRVTGRC <b>L</b> DE <b>P</b> FFQY <b>A</b> AKSPSRTSASQ	150
Human_ESM1	KCCGPGL <b>E</b> QPSNEED <b>F</b> GE <b>E</b> FG <b>C</b> ICKDCPYGTC <b>M</b> D <b>E</b> KE <b>T</b> CNCQSCICIDRVTGRC <b>L</b> DE <b>P</b> FFQY <b>S</b> VTKSEN <b>B</b> -FW <b>S</b> L	149
Rat_ESM1	TERD <b>A</b> AS <b>G</b> DN <b>A</b> VR <b>E</b> RIC <b>D</b> RNA <b>A</b> RP <b>S</b> VM <b>-F</b> WLM <b>P</b> R	184
Mouse_ESM1	TERD <b>S</b> AS <b>G</b> DN <b>A</b> VR <b>E</b> RIC <b>D</b> RNA <b>A</b> RP <b>S</b> VM <b>-F</b> WLM <b>P</b> R	184
Human_ESM1	TERD <b>M</b> AS <b>G</b> DN <b>A</b> VR <b>E</b> RIC <b>D</b> RNA <b>A</b> RP <b>S</b> VM <b>-F</b> WLM <b>P</b> R	184

**FIGURE 4**  
**Chromosome 5**



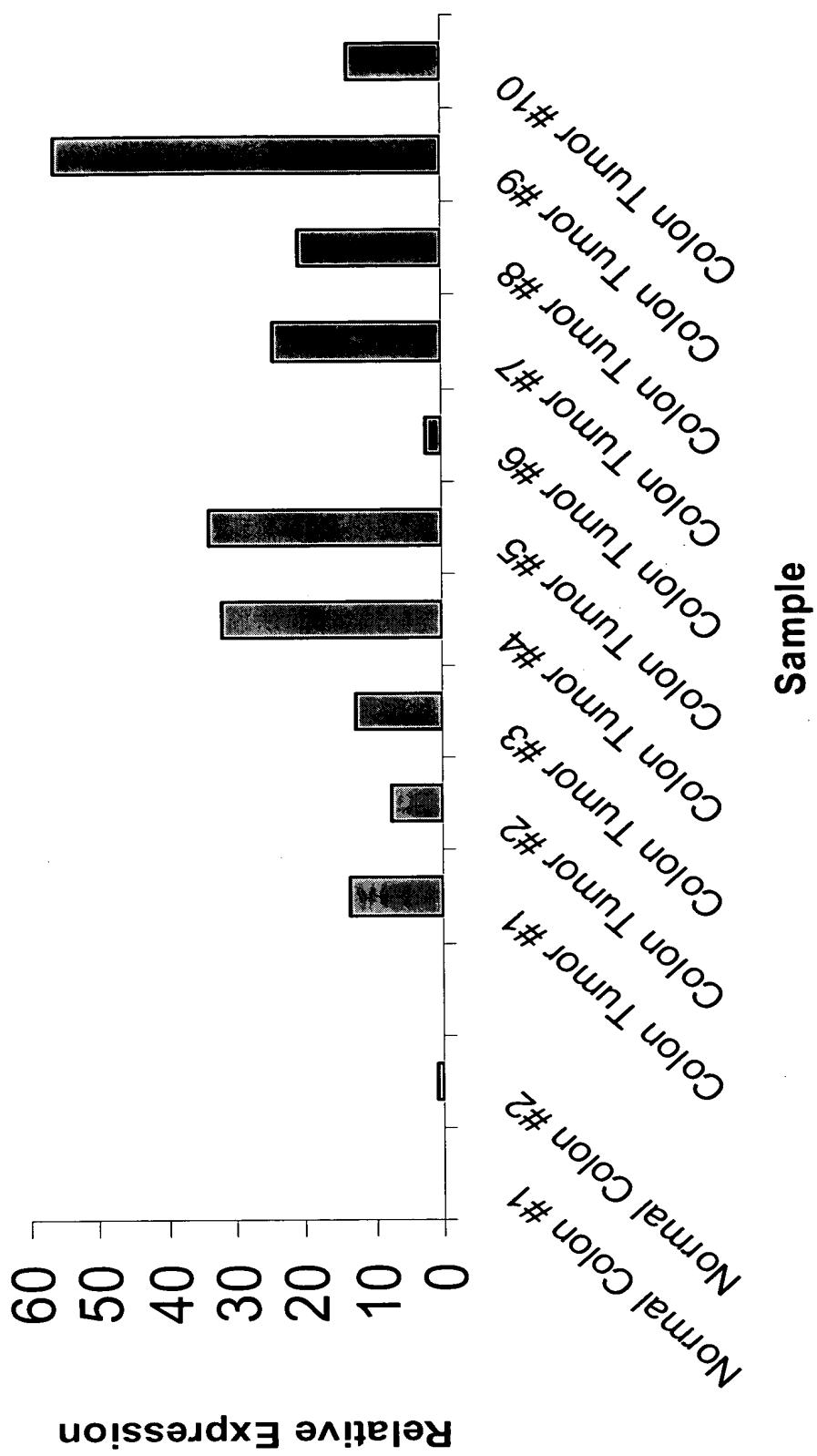
ESM-1			
Exon	acceptor site	donor site	exon size
1	CAGCT	CAAAAGgtaaa	378
2	cccagACTGT	CACGGGgt-aag	150
3	t tcaggAGCAT	GATAc	1568

**FIGURE 5**

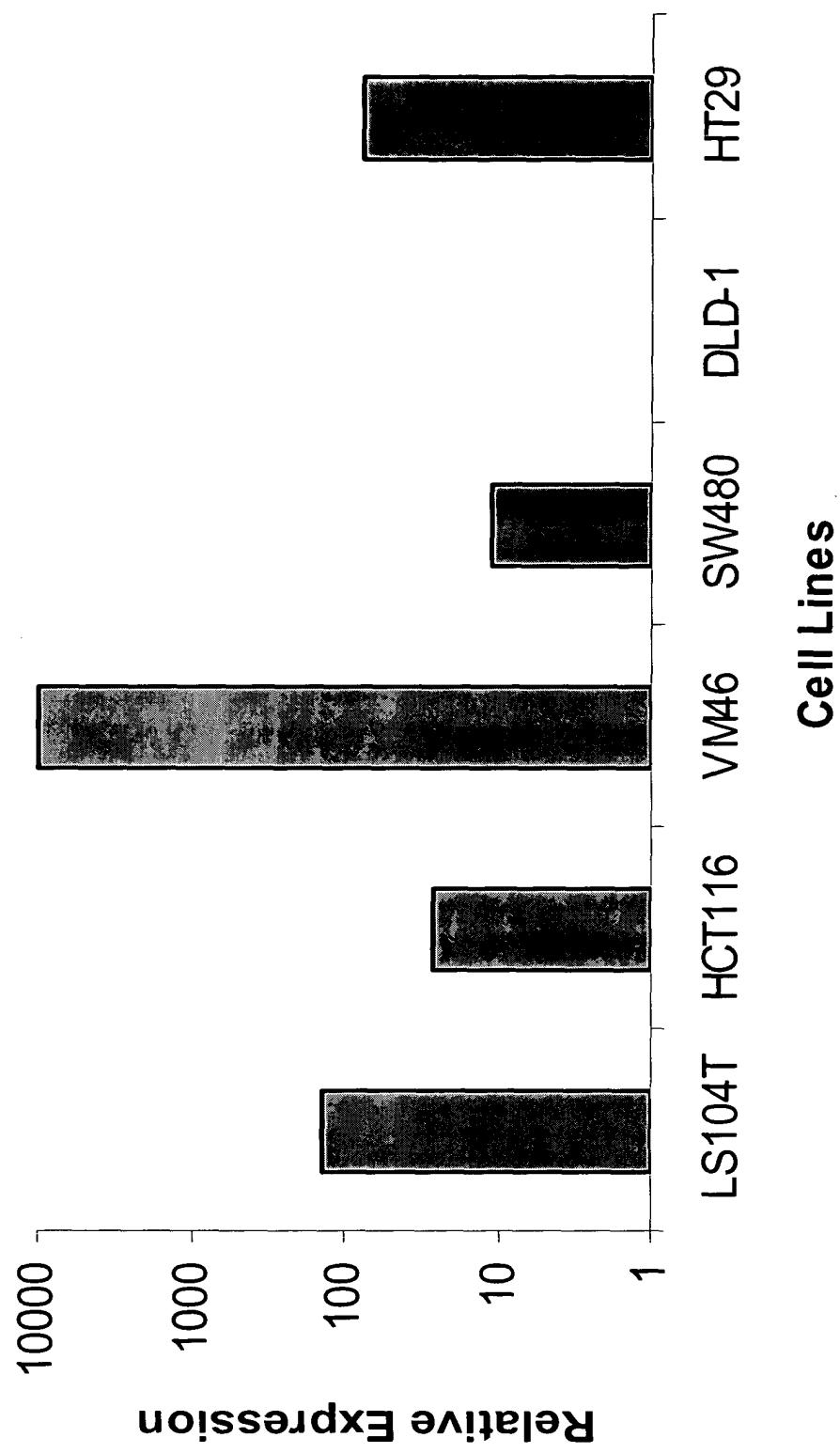
ESM-1 Fold Change of Expression in Various Tumors by Microarray Analysis											Patient 11	Ave
Tumor <sup>a</sup>	Patient 1	Patient 2	Patient 3	Patient 4	Patient 5	Patient 6	Patient 7	Patient 8	Patient 9	Patient 10	Patient 11	Ave
Breast	-1.20	-1.18	1.37	1.36	1.14	-1.09	-1.05	1.77	1.07	1.86	0.41	
Colon	1.71	2.07	1.60	2.51	1.39	-1.05	1.82	1.08	2.27	1.51	1.49	
Kidney	1.62	2.07	2.23	1.34	2.84	1.61	1.80	1.85	1.38	1.06	1.78	
Lung	1.98	1.26	1.14	3.07	3.21	2.28	2.56	4.01	3.57	2.98	3.39	2.68

<sup>a</sup> Each tumor type represents a different set of patients.

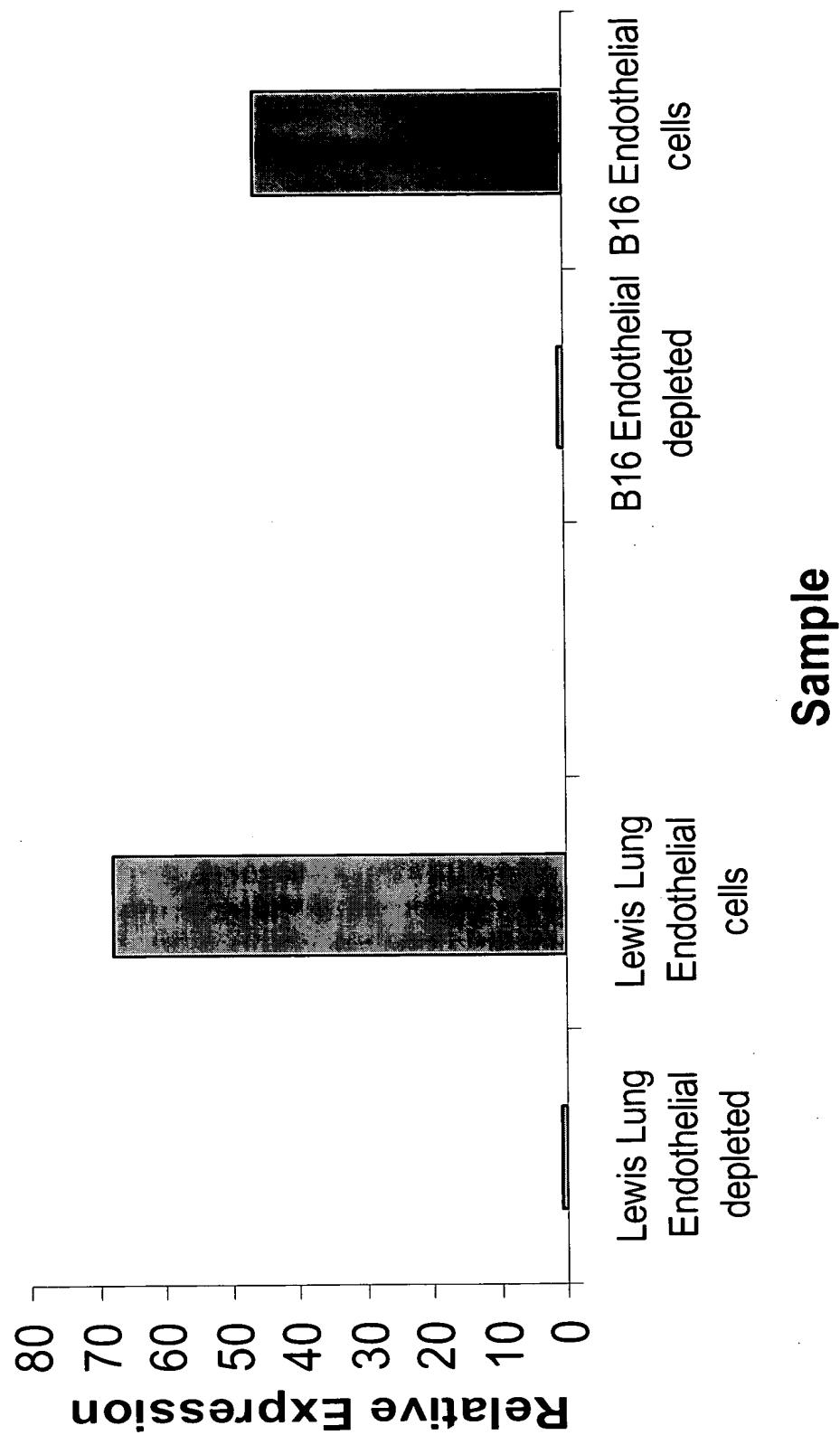
**FIGURE 6**



**FIGURE 7**

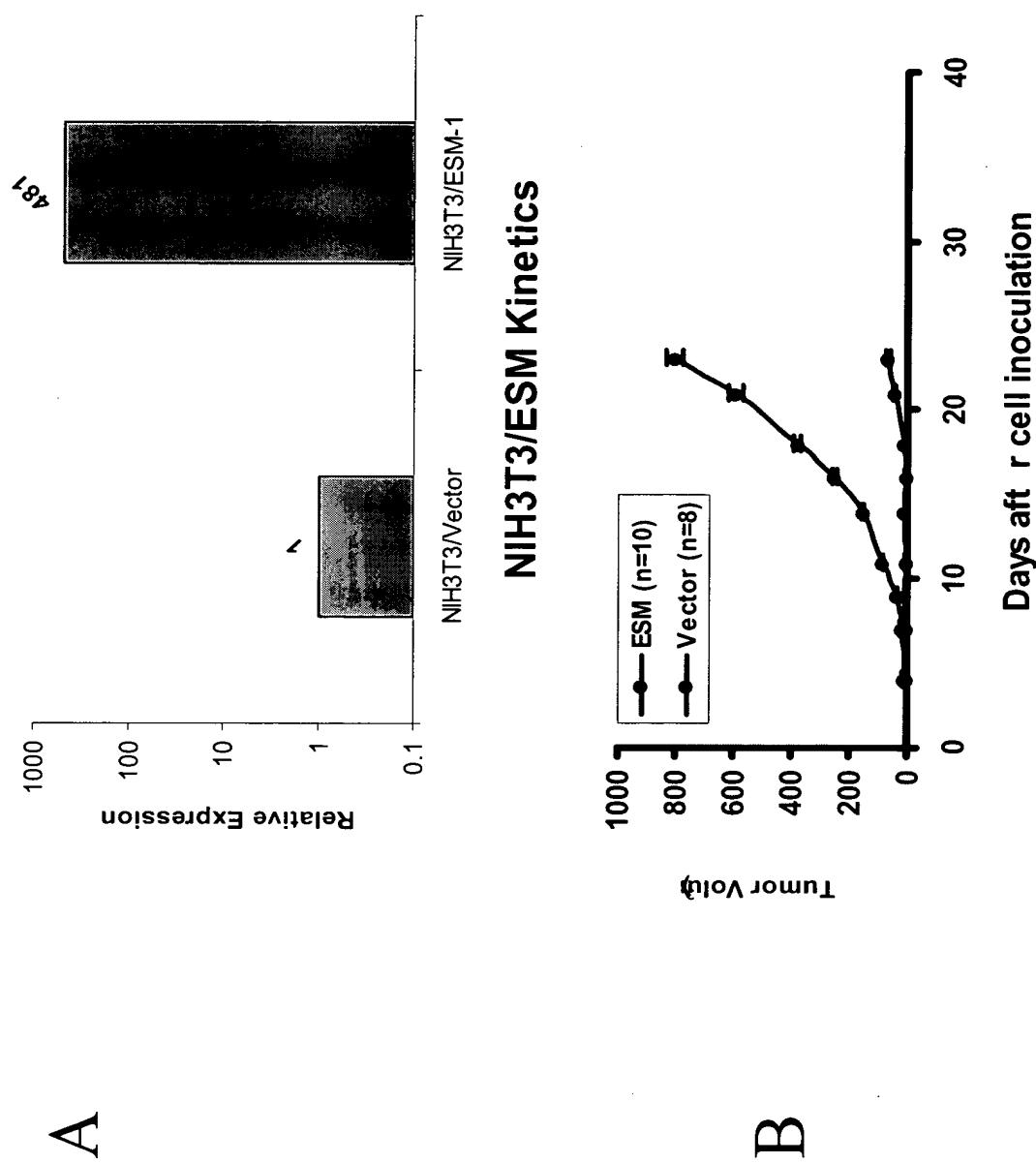


**FIGURE 8**



**FIGURE 9**

**Relative Expression of ESM-1 in Transfected NIH3T3 cells**



## **FIGURE 10**

<u>ESM-1 expression</u>		
<u>number of samples (percentage)</u>		
tumor	breast	5 (9.6)
	colon	0 (0.0)
	kidney	16 (28.1)
	lung	4 (7.7)
	ovary	0 (0.0)
	prostate	1 (2.1)
normal	breast	0 (0.0)
	colon	0 (0.0)
	kidney	1 (6.3)
	lung	0 (0.0)
	ovary	1 (7.1)
	prostate	0 (0.0)

**FIGURE 11**

